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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,202	05/06/2005	Lucyna Pawlowska	CH7660US	5171

23413 7590 02/02/2009  
CANTOR COLBURN, LLP  
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Hartford, CT 06103

EXAMINER
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CORDRAY, DENNIS R

ART UNIT	PAPER NUMBER
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1791

NOTIFICATION DATE	DELIVERY MODE
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02/02/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

usptopatentmail@cantorcolburn.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/534,202	<b>Applicant(s)</b> PAWLOWSKA ET AL.	
	<b>Examiner</b> DENNIS CORDRAY	<b>Art Unit</b> 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-12 and 44-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-12 and 44-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/17/2008</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's amendments filed 11/17/2008 have overcome the outstanding rejections under 35 U.S.C. 112. Therefore, the rejections have been withdrawn.
2. Applicant's comments regarding the Provisional Double Patenting rejections are noted. The Provisional Double Patenting rejections will be maintained until one of the applications is allowable or until the rejections are no longer applicable.
3. Applicant's arguments have been fully considered but they are not persuasive. Applicant argues that the cited prior art fails to disclose preparing the sizing composition by preparing components (a) and (b) separately. Applicant further argues that each of the independent claims requires the formation of separate components (a) and (b) and subsequent mixing of (a) and (b) to form the aqueous sizing composition.

While the claims are interpreted "in view of the specification," limitations from the specification are not read into the claims. The independent claims are directed to a composition comprising an emulsion of alkenylsuccinic anhydride (ASA) particles and a surfactant suspended in water and a second component comprising starch, dilution water, or polymer. There is no recitation or requirement that two parts of the aqueous composition be separately made and then combined. In the claimed composition, the ASA or AKD, surfactant, water, and starch or polymers, if present, form a single composition or emulsion. The products of the cited prior art are compositions that

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overlay the claimed compositions, although perhaps made by a different process. The composition product of the claimed invention or that of the prior art does not know how its components were combined. Absent a showing of unobvious results attributable to the method of forming the composition, the prior art compositions are substantially identical to, and thus anticipate or, at least, make obvious the claimed composition.

Alternatively, it has been long established by the court that the process of obtaining the product (e.g.-a composition) is immaterial or irrelevant to the patentability of a *product*. See for example, *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985) "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If a product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process."

The rejections over the cited prior art are maintained and are amended to include the amended and newly presented claims.

4. Note that the listing of claims in the rejection of Claims 5, 9 and 10 over Dilts et al (WO 01/88262 or '049) as evidenced by Chunyu has been corrected. The previous Office Action erroneously recited Claims 5, 10 and 11. The correction does not constitute a new ground of rejection as the claimed subject matter was addressed in the prior Office Action.

***Claim Rejections - 35 USC § 102***

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 1, 3, 4, 6-8, 11, 12 and 44-47 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Dilts et al (WO 01/88262).

Claims 1, 3, 6-8, 11, 12 and 45-47: Dilts et al disclose discloses a paper sizing composition comprising at least one sizing agent, which can be alkenylsuccinic anhydride (ASA) or alkylene ketene dimmers (AKD), emulsified in water, at least one emulsion stabilizer, from 0.01% to about 15% by weight of at least one hydrophobic substance, based on the total weight of sizing agent, and from 0.01% to about 10% by weight of at least one surfactant, based on the total weight of sizing agent (Abs; p 3, lines 13-17; p 5, lines 23-27; p 18, lines 33-34). The sizing agent is present in an amount from about 0.1% to about 50%, preferably from about 3% to about 38%, based on the total weight of the emulsion (p 3, lines 33-34; p 22, lines 6-12). The hydrophobic substance can be a fatty acid ester or fatty alcohol, which reads on the claimed surfactant (p 3, lines 25-26; p 6, lines 10-13; p 12, lines 14-15). The surfactant can be ethoxylated fatty alcohols (ethoxylated alkyl phenol, nonyl phenoxy polyethoxy ethanol, etc.), polyethylene glycols, trialkyl amines (tertiary amines) and their acid and quaternary salts, polyoxyalkylene alkylaryl ethers or esters, ethoxylated phosphate

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esters, etc., which read on the claimed surfactant (p 19, lines 9-18). The emulsion stabilizers are well known in the art and can be synthetic and naturally occurring anionic and nonionic polymers, such as anionic polyacrylamides, carboxymethylcellulose, phosphorylated starch, non-hydrolyzed polyacrylamides, etc., which are water soluble (p 20, lines 5-12 and 30-33). The presence of the hydrophobic substance increases the sizing efficiency of the sizing agent (p 3, lines 6-8). Alternatively, both ASA and AKD are well known sizing agents in the art and are successfully used by Dilts et al to size paper and paperboard of all types (Abs; p23, line 26 to p 24, line 2). Thus the composition imparts useful sizing properties or, at least, such sizing properties would have been obvious to one of ordinary skill in the art.

Dilts et al do not disclose the claimed Cobb sizing or HST value, or that the composition is of sufficient dilution to minimize coalescence at a temperature of from about 40 to about 200 °F. However, the many embodiments of the disclosed composition are substantially identical to the claimed composition, thus have the claimed sizing and stability properties or, at least, such properties would have been obvious to one of ordinary skill in the art because, where the claimed and prior art apparatus or product are identical or substantially identical in structure or composition, a *prima facie* case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). In other words, when the structure recited in the reference is substantially identical to that of the claims, the claimed properties or functions are presumed to be inherent.

Claim 4: Dilts et al disclose a particle size in the emulsion of about 5  $\mu\text{m}$  or less (p 19, lines 19-26).

Claim 44: Dilts et al disclose several examples wherein the emulsion is stirred at temperatures above 40 °F to dissolve the hydrophobic material (pp 29-40).

Alternatively, hydrophobic materials are generally more soluble at elevated temperatures and it would have been obvious to stir the emulsion at the claimed temperatures to dissolve the hydrophobic material.

6. Claims 1, 3, 4, 6-8, 11, 12 and 44-47 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Dilts et al (6576049).

The disclosures of Dilts et al ('049) and (WO 01/88262) are similar and the claims are rejected similarly (Abs; col 2, lines 46-67; col 3, lines 1-20 and 30-42; col 5, lines 9-12; col 9, lines 48-50; col 14, lines 46-48 and 63-67; col 15, lines 1-8, 31-33 and 40-49; col 16, lines 8-13; col 17, lines 8-16; col 18, lines 20-36; cols 22-30, Examples).

7. Claims 5, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dilts et al (WO 01/88262 or '049) as evidenced by Chunyu ("Alkenyl Succinic Anhydrides (ASA): a Neutral Sizing Agent").

Claim 5: Dilts et al do not disclose hydrolyzed ASA. It is well known that ASA is very reactive and will readily hydrolyze in the presence of water (if evidence is needed, see Chunyu, p 3, Figure 4 and paragraph immediately below the figure). It would have

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been obvious to one of ordinary skill in the art to obtain an amount of hydrolyzed ASA within the claimed range due to the large amount of water present in the sizing compositions.

Claims 9 and 10: Dilts et al do not disclose whether the particle size distribution in the sizing compositions is monomodal or multimodal. However, compositions having a broad range of particle sizes up to 5  $\mu\text{m}$  are disclosed by Dilts et al. No evidence of surprising results is given or discussed in the instant Specification for using a multimodal particle distribution over a monomodal distribution and no comparison is made with the nearest prior art cited herein. Absent any evidence of surprising properties of the solutions of the instant invention over the disclosure of Dilts et al or Novak, it would have been obvious to one of ordinary skill in the art to use any kind of particle distribution, monomodal or multimodal for the sizing composition of Yoshioka et al as functionally equivalent options.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).



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A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 1, 3-12 and 44-47 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-2, 4-13, 46 and 47 of copending Application No. 10/533190. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the copending application embody compositions that overlap the instant Claims. The copending application recites aqueous sizing compositions comprising emulsions having the same cellulose reactive sizes, surfactants and a nonionic or anionic starch component, water, or water soluble polymer. The sizing compositions have the same or overlapping features and sizing effects on fibrous substrates.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

9. Claims 1, 3-12, 44 and 45 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 4-11, 30 and 34 of copending Application No. 10/533702. Although the conflicting claims are not identical, they are not patentably distinct from each other because the copending application recites aqueous sizing compositions comprising emulsions having the same cellulose reactive sizes and two nonionic or anionic starches. One of

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the starches is an emulsifying starch, thus acts as a surfactant. Alternatively, the open language of the copending claims allows for the additional surfactant and it would have been obvious to include a surfactant as claimed as an emulsification aid. The sizing compositions have the same or overlapping particle sizes and sizing effects on fibrous substrates.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Conclusion***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to DENNIS CORDRAY whose telephone number is (571)272-8244. The examiner can normally be reached on M - F, 7:30 -4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dennis Cordray/  
Examiner, Art Unit 1791

/Eric Hug/  
Primary Examiner, Art Unit 1791

<b>Application Number</b> 	<b>Application/Control No.</b>	<b>Applicant(s)/Patent under Reexamination</b>	
	10/534,202	PAWLOWSKA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	DENNIS CORDRAY	1791	